

1

DISPLAY DEVICE

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates generally to display devices and more particularly to a display device that is formed from a single sheet of material requiring two slots that can be folded into a secure display device and then can be unfolded into a single sheet with the two slots to be stored.

2. Prior Art and Objects of the Invention

Display devices of various forms are known. One style of display device is the well-known easel used by artists. Small paper display devices such as a piece of cardboard or stiff paper bent in an inverted V shape have been used to reserve tables in restaurants and to announce which guest sits where at a gathering. A single sheet with a folding tab has also been used. These devices have limited durability and can be used with limited success. A display device, such as might be used in a sales situation to display items such as jewelry, requires strength and durability. Such devices can be made by known methods but are comparatively expensive and do not easily dismantle for storage.

The Rondone Patent, U.S. Pat. No. 4,817,905, teaches a display device which can be placed in a stable position for display purposes and also be folded flat. However, the Rondone device requires a series of folds and staples to hold the folds in place. The present invention avoids all staples or glues or any other external means but rather creates a stable secure display device by the interlocking forces of a single folded sheet of material from which the display device is formed and which can then be unfolded and returned to a flat sheet for storage.

Accordingly, it is an object of this invention to provide a display device which is made by folding a single sheet of material.

It is another object of this invention to provide a display device that can be unfolded and stored as a single flat sheet.

It is another object of this invention to provide a display device that is stable.

It is another object of this invention to provide a display device which is economical to produce.

It is another object of this invention to provide a display device that is readily stored.

Other objects and advantages of the present invention will become apparent to those of ordinary skill in the art as the description thereof proceeds.

SUMMARY OF THE INVENTION

The display device is formed from a single sheet of material. The material needs to be flexible and resilient and still be bendable so as to be creased to form hinges or lines of rotation between various areas of the sheet. The sheet has a front surface and a rear surface and has two sections, namely a display section and a support section. The sheet has a top edge and a bottom edge and two side edges. The sheet is preferably rectangular but the display section, in particular, may have a variety of shapes. The support section is located toward the bottom edge and the display section is located toward the top edge,

The display section is a flat sheet on which objects can be mounted and words and names written or printed. The support section includes a base panel located from side edge to side edge across the bottom edge. The support section has two slots, both vertical and each generally equally spaced

2

from one of the two side edges. Each of the slots extends from the base panel a part of the distance to the top edge. Between the two slots, an upper panel and a lower panel are located. The upper panel is hinged to the display section and the lower panel is hinged to the base panel and the upper panel and the lower panel are hinged to one another.

On both sides of the lower panel, a pair of rear panels are located. On both sides of the upper panel a pair of front panels are located. Both rear panels are hinged to the base panel and the pair of front panels are hinged to the rear panels. The hinges between the rear panels and the base panel are aligned with the hinge between the lower panel and the base panel. Likewise, the hinge between the upper panel and the lower panel is aligned with the hinges between the front panels and the rear panels.

The hinge between the lower panel and the base panel is placed directly beneath the hinge between the upper panel and the display section. As a result, the rear panels are located adjacent the rear surface of the front panels.

The lower panel and the upper panel are located adjacent one another and together form a rear support which is braced by the base panel. The rear panels and the front panels together form a front support. The lower panel locks in place due to the force of the lower panel being placed against the upper panel. The front support and the rear support are the support section which retains the display section in position until the lower panel is forced away from the upper panel.

BRIEF DESCRIPTION OF THE DRAWINGS

The objects and the advantages of the invention will become apparent from the following detailed description of the preferred embodiment thereof in conjunction with the accompanying drawings in which like numerals designate like elements and in which:

FIG. 1 is a pictorial view of the display device in its fully-folded locked position.

FIG. 2 is a plan view of the single sheet from which the display device is formed showing the display section and the support section with the various panels of the support section.

FIG. 3 is a pictorial view of the rear of the display device partially folded from the sheet position of FIG. 2 toward the completed position of FIG. 1.

FIG. 4 is a pictorial view of the rear of the display device fully-folded into the locked position.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to FIG. 1, the display device in its fully folded locked position is shown. The display device has a display section 11 and a support section 13 on which the display section 11 stands. In FIG. 2, a sheet 15 is shown which is the display device in its fully open position prior to folding which is also its position when stored.

The sheet 15, which is shown as rectangular, but which may have various configurations, particularly in the display section 11, has a top edge 17 and a bottom edge 19 and two side edges 21. The sheet 15 has a front surface 23 (FIG 1) and a rear surface 25. As used herein the front surface 23 and rear surface 25 (FIG 3) pertain to subsections and panels, as hereinafter described, formed within the sheet 15 the same as to the entire sheet 15. A base panel 27 is located along the bottom edge 19 of the sheet 15. Extending parallel to the side edges 21 and generally at right angles to the base panel 27 are a pair of slots 29 which are cuts from the front surface